

Installation Instructions – FluoroFoam ePTFE Joint Sealant

FluoroFoam Joint Sealant is ideally suited for large or complex steel flanges and equipment to achieve an incredibly tight seal. Available on a spool, the user can easily and quickly form a gasket in place on the flange, and achieve significant savings in material, labor, and lead-time over traditional large cut gaskets.

To install, please follow the instructions below:

1. Size Selection

For flat face flanges, raised face flanges, and manways: Measure the width of the sealing surface and reference the table below to select the nominal width of FluoroFoam Joint Sealant.

Effective Sealing Width		Joint Sealant Nominal Width	
(mm)	(inches)	(mm)	(inches)
3–7	1/8–1/4	3	1/8
7–10	1/4–3/8	5	3/16
10–17	3/8–5/8	7	1/4
17–25	5/8–1	10	3/8
25–40	1–1.5	14	1/2
40–50	1.5–2	17	5/8
50–65	2–2.5	20	3/4
65+	2.5+	25	1

For tongue and groove flanges:

Select the nominal width of FluoroFoam Joint Sealant that is equal to or less than the width.

Perform an engineering torque estimation to confirm a gasket stress higher than 17 MPa (2500 psi) can be achieved

2. Installation – Standard & Custom Flanges

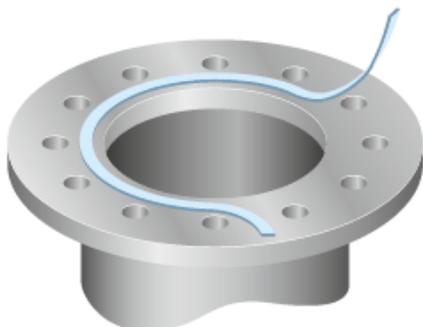
2.1 Prepare the Flange

Open the flanges a minimum of 15 cm (6"). Completely clean the surface to ensure optimal adhesion. Remove all oil, graphite, and other residue.

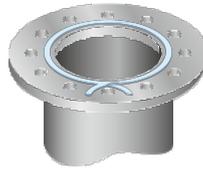
2.2 Apply Joint Sealant

Remove the adhesive backing a little at a time, to prevent the adhesive strip from picking up dirt. Position the end of the joint sealant around the starting bolt hole.

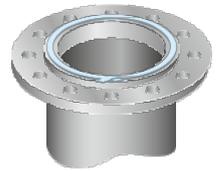
Figure 1



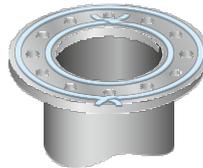
Standard Flanges
Flat Faced



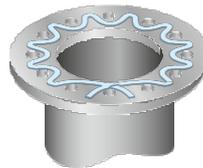
Standard Flanges
Raised Faced



Fragile Flanges

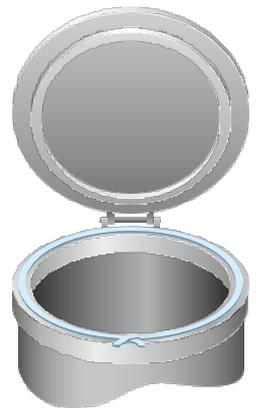


Option 1
To prevent flange
rotation



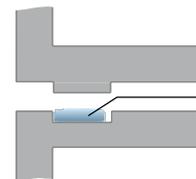
Option 2
To minimize flange
rotation.

Manways



For self-energizing manways and access doors, please contact your local FluoroFoam representative for installation guidance

Tongue & Groove



To ensure proper gasket compression, the tongue must be equal to or taller than the groove depth

No additional anti-adhesives spray or liquid should be applied to the flange surfaces. In cold conditions, gently warm the joint sealant before installation to make the adhesive more sticky.

2.3 Complete the Joint Sealant

Complete the gasket by overlapping both ends at the starting bolt hole and cut away excess material. See above illustrations

The skive cut technique is recommended to complete the gasket when 17 mm (5/8") or wider joint sealant is being used, except when installed on ASME or JIS metallic flanges.

3. installation – Joint Sealant with nominal width ≥ 17 mm

3.1 Skive Cut technique

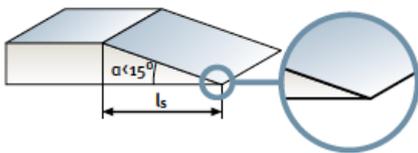
Some applications do not have enough force to compress the additional material at the overlap. This is usually the case for Joint Sealant with a nominal width ≥ 17 mm, therefore we always recommend the skive cut technique for these sizes

In general, the skive cut technique can always be used as an alternative to step 2.3. Repeat steps 2.1 to 2.2 but perform an initial and closing skive cut as described below.

3.2 Initial Skive Cut

Unwind about 0.5 m (1.5 ft) of FluoroFoam Joint Sealant. Cut the end with a sharp knife on a clean, firm surface using the skiving technique. In general, the length of the skive cut, l_s , should be approximately 25 mm (1").

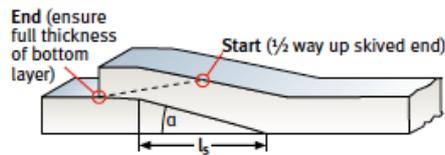
Figure 2



3.3 Closing Skive Cut

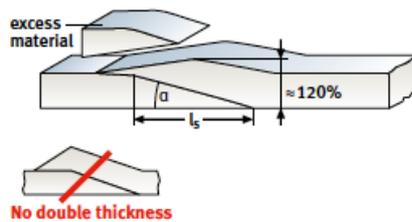
Complete the gasket by laying the Joint Sealant over the skived end, extending beyond ≈ 14 mm (1/2"). To prepare for the second and final skive cut, identify and mark the starting and end points.

Figure 3



Cut away the gasket material at an angle. This will leave an area of $\approx 120\%$ of the

Figure 4



4. Torqueing

4.1 Select a torque

As a general rule, it is advisable to make the best possible use of the available bolt force. However, the torque recommendations of the equipment manufacturer must be followed at all times.

4.2 Flange tightening Procedure

Unless the equipment manufacturer specializes a certain pattern, utilize the star pattern, multiple pass, and incremental torque. Refer to the ESA/FSA "Gasket Installation Procedures" for more detailed information on the recommended installation practice

Should you have any further questions about installation, or about our gaskets in general, contact your local FluoroFoam representative.

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